TELEMETRY SYSTEM SPECIFICATION

The Digital Telemetry System to be furnished shall be in accordance with the following:

- 16 total channels utilizing two split collar transmitters
    - 8 channel capacity per collar, each channel output must be received individually

- high pass filtering that will pass data above 10 Hz, but reject the once per rev response at 0 to 2 Hz

- use of induction power to eliminate need of batteries on the rotating structure and allow for continuous trouble free operation

- compatible with sensor type accelerometer 500mV/G 18-30V, 2-10mA (Wilcoxon 728A/728T or equivalent)

- minimum of two full scale input measurement ranges that can be selected without stopping shaft rotation
    - Lowest measurement range shall be capable of measuring levels of less than - 5.0 dB (re 1 mircoG), with a dynamic range of approximately 70.0 dB.
    - Highest measurement range shall be capable of measuring levels of up to 105 dB (re 1 microG) , with a dynamic range of approximately 70.0 dB.

- digital sample rate of 5889 SPS

- 12-bit digital resolution (0.025% FS)

- signal band width of 10 to 1000Hz (-3dB)

- 0 to 120 rpm rotational speed

- 0 to 120°F temperature range:

- 120 VAC, 50-60 Hz power

- +/- 1 V full scale analog voltage output

The Telemetry System will be furnished with split collar transmitter of the following dimensions:

One - 18.875 +/- 0.01" inner diameter x 2" radial x 1.5" axial
One - 10 +/- 0.01" inner diameter x 2" radial x 1.5" axial

The Telemetry System will be furnished with three 80 foot long stationary antenna-to receiver wires

The contractor will provide dimensional drawings of the split collar transmitters, stationary receiver/s, and stationary antennas and mounting requirements for the split collar transmitter and stationary antennas for the purpose of preparing shipboard installation drawings within 40 days after date of order.

The contractor will provide the telemetry system hardware within 150 days after date of order.